



## DEFENSE LOGISTICS AGENCY

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IN REPLY  
REFER

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May 12, 2004

### MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Drafts of MIL-PRF-55339/1B, /3A through /25C, /32A through /39A and /49A through /51A; Adapter, Connectors, Coaxial, Radio Frequency, Various Series; Project Numbers 5935-4657-001 through -035.

The initial drafts for this subject documents will be available for viewing and downloading from the DSCC-VAI Web site within the next 5 working days:

<http://www.dsccl.dla.mil/Programs/MilSpec/initialdrafts.asp>

Changes to this document include new part number additions that allow for the use of Nickel plated adapter bodies, contact resistance values for the new plating and format up dates. However, the entire set of specification sheets are offered up for comment.

Concurrence or comments are required at this Center within 45 days from the date of this letter. Late comments will be held for the next coordination of this document. Comments from Military Departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians, as applicable, in sufficient time to allow for consolidation of the Department reply.

Please forward your comments or concurrence electronically to the project officer listed below. This can be in the form of a return e-mail, with or without attached text files. If an electronic response is not possible, we will accept comments via letter, facsimilie, or phone call. Any further coordination concerning this document will be circulated only to firms and organizations that furnish comments or reply that they have an interest.

The point of contact for this document is Mr. Ron Gary. The preferred method of contact is via e-mail: [Estel.Gary@dlm.dla.mil](mailto:Estel.Gary@dlm.dla.mil). Mr. Gary can also be reached at 614-692-0568/DSN 850-0568, or by facsimilie 614-692-6940.

Sincerely,

/SIGNED/

RICHARD L. TAYLOR  
Chief,  
Interconnection Devices Team

*Note: This draft dated 10 May 2004, prepared by the Defense Supply Center Columbus (DSCC-VAI) has not been approved and is subject to modification.*

**DO NOT USE FOR ACQUISITION  
PURPOSES**

MIL-PRF-55339/14A

**DRAFT**

**SUPERSEDING**

MIL-PRF-55339/14

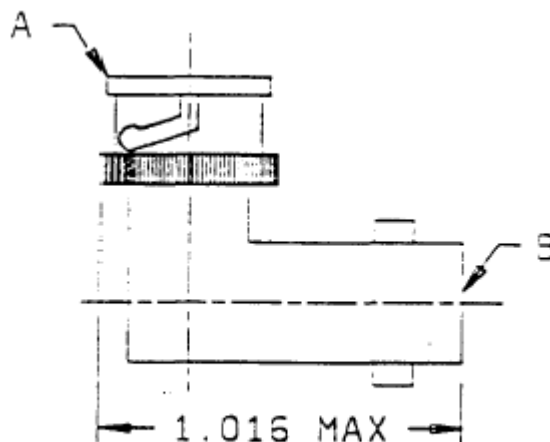
6 May 1975

## PERFORMANCE SPECIFICATION

ADAPTER, CONNECTOR, COAXIAL, RADIO FREQUENCY. RIGHT ANGLE,  
(WITHIN SERIES BNC JACK TO SERIES BNC PLUG), CLASS 2

This specification is approved for use by all Departments  
and Agencies of the Department of Defense.

The requirements for acquiring the adapter described herein shall  
consist of this specification sheet and MIL-PRF-55339.



### NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. All undimensioned pictorial representations are for reference purposes only.
4. Interface dimensions shall be in accordance with MIL-STD-348.

FIGURE 1. General configuration.

AMSC N/A

FSC 5935

DESIGN AND CONSTRUCTION:

General configuration. See figure 1.

Impedance 50 ohms, nom.

Working voltage: Sea level – 500 Vrms.  
70,000 feet – 125 Vrms

Frequency range: 0 to 4 GHz.

Temperature range: -65° to +165°C.

PERFORMANCE (installation torque is not applicable).

Dimensions – See figures 1 and MIL-STD-348.

Center contact retention: Axial force – 6 lb min.  
Torque – 4 in. oz, min.

Force to engage and disengage: Longitudinal force – 3 lb, max.  
Torque – 2.5 in. lb, max.

Coupling proof torque: Not applicable.

Mating characteristics:

Center contact (socket):

Oversize test pin dia - .057 in., min.  
Insertion depth - .125 in., min.  
No. of insertions – 1.

Max test pin (insertion force test):

Steel test pin dia - .054 in., min.  
Pin finish – 16 microinches.  
Insertion force – 2 lb, max.  
No. of insertions – 1.

Min test pin (withdrawal force):

Steel test pin dia - .052 in., max.  
Pin finish – 16 microinches.  
Withdrawal force – 2 oz, min.  
No. of withdrawals – 1.

Outer contact:

Min test ring ID - .391 in., max.  
Ring finish – 16 microinches.  
Insertion force – 5 lb, max.  
Insertion depth - .093 in., min.  
No. of insertions – Not applicable.  
Max test ring ID - .324 in., min.  
Test ring finish – Not applicable.  
Insertion depth - .031 in., max.  
No. of insertions – Not applicable.

Permeability: <2.0

Seal: Hermetic – Not applicable.

Pressurized – Not applicable.

Weatherproof – Not applicable.

Insulation resistance: 5,000 megohms, min.

VSWR: 1.30:1, max .5 to 4 GHz.

RF leakage (total): Not applicable.

RF insertion loss: .25 dB, max, 3 GHz (.144  $\sqrt{F}$  (GHz) dB max tested at 3 GHz)

Durability: 500 cycles minimum at 12 cycles/min maximum. The connector shall meet the mating characteristics and force to engage and disengage requirements.

Dielectric withstanding: Test voltage – 1,500 Vrms, min (sea level).

Contact resistance (milliohms, max).

<u>Contact</u>	<u>Initial</u>	<u>After</u>
Center	2.5	3.0
Outer	0.5	N/A
Outer (-70001)	1.0	N/A

Vibration, high frequency: Interruptions – 1  $\mu$ s, max.

Shock: Test condition I.

Thermal shock: Test condition C.

Moisture resistance: 200 megohms, min

Corona level: Voltage – 375 V, min.  
Altitude - 70,000 feet, min.

RF high potential withstanding voltage: RF voltage – 1,000 Vrms. min.  
Frequency – 5 MHz, min.

Salt spray (corrosion): Applicable.

Coupling mechanism retention force: 100 lb, min.

Part Identifying Number (PIN): M55339/14-00306 or:

PIN: M55339/14-70001 **CAUTION: THIS PART HAS A NICKEL PLATED BODY AND IS NOT FOR USE IN APPLICATIONS WHERE PASSIVE INTERMODULATION GENERATION (PIM) MAY BE A CONCERN.**

TABLE I. Cross reference of part numbers.

Part number	Superseded part number or type designation <u>1/</u>
M55339/14-00306	MS35368 UG-306B/U

1/ The superseded part number or the type designation is for cross reference only. Where a superseded part number or type designation is not given, none was assigned or will be assigned. PIN: M55339/14-00306 shall be used in all cases for marking and identifying the adapter.

Referenced documents.

MIL-STD-348  
MIL-PRF-55339

CONCLUDING MATERIAL

Custodians:

Army – CR  
Navy – EC  
Air Force – 11  
DLA - CC

Preparing activity:

DLA - CC

(Project 5935-4657-013)

Review activities:

Army – AR, AT, EA, MI  
Navy – AS, MC, OS, SH  
Air Force – 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at [www.dodssp.daps.mil](http://www.dodssp.daps.mil).